Written by MT Staff
Thursday, 17 February 2011 10:43

In an age where no potential economy can be overlooked, lubricants and lube-related products are increasingly seen as another **key path to reliability**.

(Click here for a list of this month's Technology Showcase sponsors.)

The days of randomly applying oil, grease and fluids to machinery are giving way to a better understanding among maintenance and operations personnel of what lubricants really do—*including the role they play in production efficiency.*

The lubrication category includes four main sectors: oils and greases for equipment operation; penetrants, coolants and other fluids; analysis services; and filtration products*. Significant category developments include growth in the use of **synthetic lubricants** (made of compounds created from non-mineral sources) and its sub-sector of
biodegradables
(often formulated with natural oils such as vegetable and canola) that break down when released into the environment. More expensive than petroleum-based lubricants, synthetics

typically have better low- and high-temperature viscosity performance and better resistance to thermal breakdown, promote longer machine life and use less energy. Applicable for most industrial uses, they are a good fit for the environmentally sensitive demands of pharmaceutical, food and beverage.

Greater emphasis on **oil analysis**—*the process by which in-use oil is routinely sampled and analyzed for contamination and other efficiency-robbing factors*
—is yet another major category development. Requests for oil-analysis training (as well as lubrication certification) are up, according to industry experts, and many laboratories have expanded their services to address a wider range of oil-related issues. Also, many lubricant companies have begun to emphasize holistic
lubrication-management solutions
over quantity and price, particularly among smaller suppliers.

No lubrication review is complete without noting the status of **future sources.** While growth in synthetics and biodegradables is expected to thrive—
along with research into sustainable crude-oil alternatives
—petroleum stock remains at the core of most large-scale lubrication efforts. Despite widespread concern that world supplies are dwindling, major petroleum producers continue to invest heavily in technologies to find and tap new sources of oil (with seismic mapping, directional drilling and expanded offshore drilling), while they also explore unconventional sources like heavy oil and oil sands. These efforts are expected to continue well into the future.

Rick Carter, Executive Editor

**Definition determined by Maintenance Technology editorial staff.*

This month's Technology Showcase brought to you by the following advertisers:

LUDECA INC.

EXAIR®

NTT Training

DES-CASE™

Joomla SEO powered by JoomSEF